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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,296	07/14/2003	Wing Lee	IDF 2398 4000-12500	6314
28093 SPRINT 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			EXAMINER WINTER, JOHN M	
			ART UNIT 3685	PAPER NUMBER
			MAIL DATE 01/16/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,296

Applicant(s)

LEE, WING

Examiner

JOHN M. WINTER

Art Unit

3685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-78 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 43-78 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Acknowledgements

1. The Applicants amendment filed on October 24, 2008 is hereby acknowledged, Claims 43-78 remain pending .

Response to Arguments

2. The Applicants arguments filed on October 24,2008 have been fully considered.

Applicant respectfully submits that none of the applied art alone or in combination teaches or suggests an enterprise integration layer and a messaging system as described therein and claimed, Applicant maintains that Suarez, alone or in combination with the other applied art, does not teach or suggest automatically publishing business events in accordance with the interactions between the front-office systems and the back-office systems, as claimed.

The Examiner responds that the term “publish is construed as “to make generally known”, there is no limitation in the claimed invention as to what parties the information is made know to (i.e .the difference between a broadcasting of information and a sending of information to a specific destination), therefore the Examiner submits that the process as described by Suarez “As seen in FIG. 2, the illustrated process flow 22 is typically comprised of one or more activities 24 which are performed on a work item 25 in a prescribed sequence. It is through the communication of defined services 16 with one another that the various processes and process flows 22 are performed and tasks are accomplished. Associated with each process or process flow 22 is a variety of other

information referred to as attachments” meets the limitation of the claimed invention.

Information is transmitted by a first party and received by a second, which is construed by the Examiner as an act of “publishing”.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 43-78 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent and recent Federal Circuit decisions, § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim(s), the method is not a patent eligible process under 35 U.S.C. § 101.

Claim 43 is a process claim and therefore not tied to another statutory class, furthermore Claim 43 discloses a mere nominal recitation of technology and fails to transform the underlying subject matter to a different state, therefore the claimed method is non-statutory and rejected under 35 U.S.C. 101 (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)).

Claims 44-78 are dependant upon claim 43 or contain similar language and are rejected for at least the same reason.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 43-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suarez (US Patent 5,790,789) in view of Hejlsberg et al (US Patent 7,165,239), and further in view of Bownman-Amuah (US Patent 6,742,015).
4. As per claim 43
Suarez ('789) discloses a system for making computing applications throughout an enterprise aware of business events, comprising:
defining objects in an enterprise object model that model data and services provided by back-office systems; (Column 12 lines 37-64)
brokering interactions, by an enterprise integration layer, between the back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the

interactions, (Figure 11; Discussion of communication between processes at column 9, line 53)

brokering the interactions comprising: receiving, from the front-office systems, accesses to objects of the enterprise object model in the enterprise integration layer through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the objects of the enterprise object model; (Column 9, lines 14-39)

implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems; (Column 11, lines 15-43; column 34 lines 52-67 -- Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.)

Suarez ('789) does not explicitly disclose transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects; Hejlsberg et

al. ('239) discloses transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects;(Column 5, line 60 – column 6 line 44) It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks; furthermore the combination of these elements does not alter their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Suarez ('789) does not explicitly disclose publishing by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems; subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event aware of the business event.Bownman-Amuah ('015) discloses publishing by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems; subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event aware of the business event. (Column 76, line 21 discussion of “object messaging, including CORBA and Dcom implementations) It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Bownman-Amuah ('015)'s teaching in order to create an abstraction layer that encapsulates differences between objects and allows interaction via common interface; furthermore the combination of these elements does not alter their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention..

The claimed feature of “automatically publishing, generating etc...” merely automates procedures that have been well established in the area of business software, it is the examiners position that that automation of a process does not establish novelty (*In re Venner*, 120 USPQ 192,194)

5. Claims 45 and 47 are not patentably distinct from claim 43 and are rejected for at least the same reasons. Examiner notes that in regards to claim 47 Suarez discloses a description of an “event Service at Column 21, line 35 that discloses how a process is triggered in response to a event (i.e. milestone).

As per claim 44,

6. Suarez ('789) discloses the method of claim 43, further comprising:
defining and storing rules in a rules engine within the enterprise integration layer, the

rules including rules regarding when to automatically publish the business events in accordance with the interactions, (Figure 6)

Suarez ('789) does not explicitly disclose rules regarding the transforming of the accessed objects of the enterprise object model to the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors, wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events.

Hejlsberg et al. ('239) discloses rules regarding the transforming of the accessed objects of the enterprise object model to the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors, wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events.(Column 5, line 60 – column 6 line 44), It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks.

Examiner notes that the language "rules regarding when to publish etc...." is representative of non-functional descriptive information and it has been held such information will not distinguish a claimed device from the prior art (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983), *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01).

7. As per claim 46,

Suarez ('789) discloses the method of claim 43, further comprising:

holding, in a metadata repository within the enterprise integration layer, metadata supplied by the set of adaptors(Column 13, lines 39-67)

- i. Suarez ('789) does not explicitly disclose enables the transforming of the accessed objects of the enterprise object model to the format of the back- office systems. Hejlsberg et al. ('239) discloses enables the transforming of the accessed objects of the enterprise object model to the format of the back- office systems. (Column 5, line 60 – column 6 line 44). It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks. Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.

8. As per claim 48,

Suarez ('789) discloses the method of claim 43 wherein implementing data functions and service methods associated with the accessed objects further comprises:

performing one or more of object assembly, object disassembly, and service invocation functions, wherein performing object assembly includes creating a composite object by aggregating data from a plurality of the back-office systems, performing object disassembly includes breaking a composite object into multiple objects for storage in at least one of the back-office systems, and performing service invocation includes determining which functions to invoke on one or more of the back-office systems.(Column 19, lines 11-46)

9. As per claim 49,

Suarez ('789) discloses the method of claim 43, wherein one of the business events occurs upon the implementation of the data functions and the service methods associated with the access objects, including one or more of creating data, reading data, updating data, deleting data, and invoking one of the service methods. (column 12, lines 47-64, Figure 6)

10. As per claim 50,

Suarez ('789) discloses the method of claim 43, wherein the automatic generation of the message for each subscribed business event further comprises:
mapping, by one or more adaptors of a transformation layer of the messaging system, data corresponding to the business events published by the enterprise integration layer between a format of a source of the business events and a format of the computing applications. (Figure 6)

11. As per claim 51,

Suarez ('789) discloses the method of claim 50,

Suarez ('789) does not explicitly transforming, by a source application adaptor of the one or more adaptors, data related to a business event from a format of a source of the business event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data from the standard data format to a format of a target subscribed to the business event.

Hejlsberg et al. ('239) discloses transforming, by a source application adaptor of the one or more adaptors, data related to a business event from a format of a source of the business event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data from the standard data format to a format of a target subscribed to the business event.

(Column 5, line 60 – column 6 line 44), It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks.

12. Claims 52-78 are not patentably distinct from the above rejected claims and are rejected for at least the same reasons.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. WINTER whose telephone number is (571)272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMW

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685